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## WHAT IS CLAIMED IS:

A computer comprising:

an operating system controlling a computer resource; and

- an intrusion detection system integrated with the operating system and operable to monitor the computer resources to detect and prevent intrusion attempts.
- 2. The computer, as set forth in claim 1, wherein the computer resource is selected from the group consisting of data storage system, input/output system, a networking system, an application program execution environment, and interfaces to peripheral devices.
- 3. The computer, as set forth in claim 1, wherein the computer resource comprises an application program execution environment and a networking system under the control of the operating system and monitored by the intrusion detection system to detect, prevent and report intrusion attempts.
- 4. The computer, as set forth in claim 1, further comprising an anti-virus system integrated with the operating system and operable to monitor the data storage system, input/output system, networking system, application program execution environment, and interfaces to peripheral devices to detect the presence of at least one virus.
- 5. The computer, as set forth in claim 1, further comprising an anti-virus system integrated with the operating system and operable to monitor the data storage system, input/output system, networking system, application program execution environment, and interfaces to peripheral devices to detect and report the presence of at least one virus.
- 6. The computer, as set forth in claim 2, wherein intrusion detection is integrated with a networking stack of the networking system above the link layer operable to access raw network frames.

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- 7. The computer, as set forth in claim 2, wherein the intrusion detection system is integrated with a networking stack of the networking system above the network layer operable to access reassembled fragments.
- The computer, as set forth in claim 2, wherein the intrusion detection system is integrated with a networking protocol stack of the networking system above the transport layer.
  - 9. The computer, as set forth in claim 2, wherein the intrusion detection system is integrated with a networking stack of the networking system between the network layer and the transport layer and between the transport layer and the application layer.
  - The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to prevent reassembly of a virus.
  - The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to recognize a virus.
  - The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to prevent storage of a virus.
  - The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to prevent transmission of a virus.
  - 14. The computer, as set forth in claim 2, wherein the anti-virus system comprises a module operable to prevent execution of a virus.

## 15. A method comprising:

executing an OS-integrated intrusion detection system; and

monitoring at least one computer resource to detect and prevent intrusion attempts.

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- 16. The method, as set forth in claim 15, wherein monitoring at least one computer resource comprises monitoring at least one computer resource selected from the group consisting of a data storage system, an input/output system, a networking system, an application program execution environment, and interfaces to peripheral devices.
- The method, as set forth in claim 15, wherein monitoring at least one computer resource comprises reporting intrusion attempts.
- 18. The method, as set forth in claim 16, further comprising integrating the intrusion detection system with a networking system above the link layer operable to access raw network frames.
- 19. The method, as set forth in claim 15, further comprising integrating the intrusion detection system with a networking stack of the networking system above the network layer operable to access reassembled fragments.
- 20. The method, as set forth in claim 15, further comprising integrating the intrusion detection system with a networking protocol stack of the networking system above the transport layer.
- 21. The method, as set forth in claim 15, further comprising integrating the intrusion detection system with a networking stack of the networking system between the network layer and the transport layer, and between the transport layer and the application layer.

## A method comprising:

executing an OS-integrated anti-virus system; and

monitoring at least one computer resource to detect the presence of at least one

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virus.

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- 23. The method, as set forth in claim 22, wherein monitoring at least one computer resource comprises monitoring at least one computer resource selected from the group consisting of a data storage system, an input/output system, a networking system, an application program execution environment, and interfaces to peripheral devices.
- 24. The method, as set forth in claim 22, wherein monitoring at least one computer resource comprises reporting the presence of at least one virus.
- 25. The method, as set forth in claim 22, wherein the step of monitoring comprises detecting the reassembly of a virus.
- 26. The method, as set forth in claim 22, wherein the step of monitoring comprises recognizing a virus.
- 27. The method, as set forth in claim 22, wherein the step of monitoring comprises preventing the storage of a virus.
- 28. The method, as set forth in claim 22, wherein the step of monitoring comprises preventing the transmission of a virus.
- The method, as set forth in claim 22, wherein the step of monitoring comprises preventing the execution of a virus.